1) JP Utility 06-036331

(11) Japanese Utility Model Laid-open No.: 6-36331

(43) Japanese Utility Model Laid-open Date: May 13, 1994

(51) Int. Cl.[5]

H02J 3/06

Examination: Not yet requested

No. of Claims: 2

(21) Japanese Utility Model Application No.: 4-69235

(22) Japanese Utility Model Application Date: October 5, 1992

(71) Applicant for Utility Model: 000000284

1-2, Hiranocho 4-chome, Chuo-ku, Osaka-shi, Osaka-fu

Osaka Gas Co., Ltd.

(72) Inventor: Koji OKUDA

1-2, Hiranocho 4-chome, Chuo-ku, Osaka-shi,

Osaka Gas Co., Ltd.

(74) Agent: Patent Attorney, Masamichi MATSUDA

54 [Title of the Device] Energy Supply System

57 [Abstract]

[Object]

To provide an energy supply system that can supply an energy load with energy even if some of energy supply means halt, thereby achieving efficient energy supply.

[Constitution]

Energy supply means 1a to 1e supply energy consumption areas 1a to 1d with energy. Control means 3a to 3e control the operating conditions of the energy supply means 1a to 1e respectively so that the energy supply means 1a to 1e may supply the energy consumption areas 1a to 1d respectively with energy that is demanded thereby. The energy supply means 1a to 1e each supply and/or receive energy to and/or from other energy supply means. In the event that one of the control means 3a to 3e for the respective energy supply means 1a to 1e suffers a breakdown, another controls the operating conditions of one of the energy supply means 1a to 1e that is to be controlled by the one of the control means that suffers the breakdown.

1a, 1b, 1c, 1d: energy consumption areas (energy loads)

2a, 2b, 2c, 2d, 2e: energy supply means

3a, 3b, 3c, 3d, 3e: control means

4: commercial power

5a, 5b, 5c, 5d: supply gas sources

6a, 6b, 6c, 6d: heat exchangers

7: cooperative power line

8: cooperative thermal supply line

9: cooperative communication line

10: power supply line

[0014]

Symbol N, i.e., environmental contaminants are exemplified by CO_2, NO_x and SO_x. Assuming that W_1, W_2, and W_3 are weighting factors, the environmental contaminants can be evaluated by: $N = W_1(CO_2) + W_2(NO_x) + W_3(SO_x)$. In particular, when attention is focused on only CO_2, $W_1 = 1$, $W_2 = 0$, $W_3 = 0$; when focused on only NO_x, $W_1 = 0$, $W_2 = 1$, $W_3 = 0$; and when focused on only SO_x, $W_1 = 0$, $W_2 = 0$, $W_3 = 1$. An environmental contaminant targeted for evaluation can arbitrarily be determined depending on conditions.